

Wyoming Mineral  
Corporation

Exploration and Mining  
Division

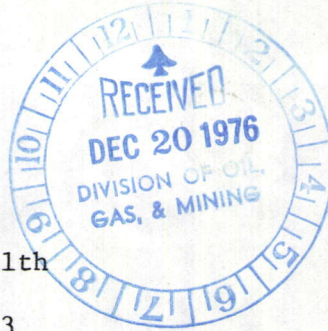
L&S-76-917  
3900 S. Wadsworth Blvd.  
Lakewood, Colo. 80235  
Phone 303 988-8530

A Subsidiary of  
Westinghouse Electric Corporation

Route # File  
in Wyo Min.

7 BUB

December 15, 1976



Lynn M. Thatcher  
Deputy Director of Health  
Utah State Division of Health  
44 Medical Drive  
Salt Lake City, Utah 84113

Subject: Notice of Construction/State of Utah Air Emissions Permit

Dear Mr. Thatcher:

Wyoming Mineral Corporation would like to make formal application for an air emissions permit by filing a notice of construction for a uranium recovery plant at Copperton, Utah. Air emissions are expected to arise from a boiler, the precipitation circuit, and the dryer.

In order to answer any questions you may have on plant air emissions, please find enclosed a generalized description of the plant (attachment A), air emissions data (attachment B), and air monitoring programs (attachment C). Should you have any further questions or need any additional information, please do not hesitate to call.

Sincerely yours,

W. H. Ford

W.H. Ford, Engineer  
Licensing and Safety

WHF/tlu  
Attachments, (3)

cc: Ron W. Daniels,  
Coordinator-Mineral Land Dept. ✓

Tony Bullock,  
Industrial Commission of Utah

Dennis R. Daily,  
Utah State Div. of Health



## ATTACHMENT A

### GENERALIZED DESCRIPTION OF THE URANIUM/COPPER PROJECT COPPERTON SITE

Wyoming Mineral Corporation in cooperation with Kennecott Copper Corporation plans to construct a uranium extraction plant on a 1.3 acre site near Copperton, Utah on Kennecott Copper Corporation property. (Figures 1, 2 and 3) This plant will recover an estimated 143,000 pounds of uranium ( $U_3O_8$ ) per year from a portion of the waters now used by Kennecott Copper Corporation in its mine dump leach operation. There will be no conventional mining activities such as earth moving or waste dumps associated with Wyoming Mineral Corporation activities at Copperton.

#### PROCESS

The waste dumps utilized by the Kennecott operations contain low concentrations of copper, uranium and other metals which are leached by the natural actions of water, oxygen and bacteria.

Kennecott's plant now processes approximately 46,500 gallons per minute of dump drainage water to recover the dissolved copper. Wyoming Mineral will divert approximately 6,666 gallons per minute of this water as it leaves the Kennecott plant, recover the uranium present and return the residual water to the Kennecott process. (See Figure 4 "Process Flow Sheet")

The uranium extraction plant will employ a continuous process in which the uranium is removed from solution by absorption with an ion-exchange resin. Subsequently, the uranium will be removed from the resin by a sulfuric acid solution. The resin will then be recycled to absorb more uranium. The sulfuric acid solution will be mixed with an organic solvent to extract the uranium from the acid and to concentrate the uranium in the organic solvent. The organic solvent



